

Study Report



Analyzed File	KTS-DECK-03101 v1
Version	Autodesk Fusion 360 (2.0.1774)
Creation Date	2016-01-14, 12:22:33
Author	patchb

▣ Project Properties

Title	Studies
-------	---------

▣ KTS-DECK-03101 v1:1

▣ Study 2 - Static Stress

▣ Study Properties

Study Type	Static Stress
Last Modification Date	2016-01-14, 12:13:02

▣ Settings

▣ General

Contact Tolerance	0.1 mm
Remove Rigid Body Modes	No

▣ Mesh

Average Element Size (% of model size)	
Solids	10
Minimum Element Size (% of average size)	20
Maximum Turn Angle	60
Grading Factor	1.5
Create Curved Mesh Elements	Yes
Use Part Based Measure for Assembly Mesh	No

▣ Adaptive Mesh Refinement

Number of Refinement Steps	0
Minimum Refinement Step Difference (%)	10
Portion of Elements to Refine (%)	25
Results for Baseline Accuracy	Von Mises Stress

▣ Materials

Component	Material	Safety Factor
	Steel	Yield Strength

▣ Steel

Density	7.85E-06 kg / mm ³
Young's Modulus	210000 MPa
Poisson's Ratio	0.3
Yield Strength	207 MPa
Ultimate Tensile Strength	345 MPa
Thermal Conductivity	0.056 W / (mm C)
Thermal Expansion Coefficient	1.2E-05 / C
Specific Heat	480 J / (kg C)

▣ Constraints

▣ Fixed1

Type	Fixed
------	-------

Ux	Yes
Uy	Yes
Uz	Yes

☐ **Selected Entities**



☐ **Loads**

☐ **Force1**

Type	Force
Magnitude	889.6 N
X Value	0 N
Y Value	-889.6 N
Z Value	0 N

☐ **Selected Entities**

